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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/925,960	08/10/2001	Koji Shibata	041514-5136	4410

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EXAMINER

NOLAN, DANIEL A

ART UNIT	PAPER NUMBER
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2654

DATE MAILED: 04/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/925,960

Applicant(s)

SHIBATA ET AL.

Examiner

Daniel A. Nolan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 August 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. <u>8</u> |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4.7</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed 10 January 2003 fails to comply with 37 CFR 1.98(a)(1), which requires a list of all patents, publications, or other information submitted for consideration by the Office. It has been placed in the application file, but the information referred to therein has not been considered.

Specification

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification, such as:

- "*Mixedly broadcasted*" should read "*broadcast intermixed*" (17th line, page 2).
- "*makes ... have*" should read "*gives*" (19th-20th lines page 2).
- "data-receiving" should be hyphenated as an entity or combined term.
- "de-interleaved" should be hyphenated or in quotes (2nd line from end, page 4).
- "manner" is misspelled (12th line page 20).

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The following title is suggested: *"Imbedding Synthesizing Voice Control Characters in Transmission"*.

Drawings

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description:

- 302 & 304 are not explained (figure 5).

A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Nishida et al & the VoiceXML Programming Tutorial

7. Claims 1 and 2 are rejected under 35 U.S.C. 103(b) as being unpatentable over Nishida et al (U.S. Patent 5,845,248) in view of the VoiceXML Programming Tutorial ("Voice eXtensible markup Language", VoiceXML Forum © March 2000).

8. Regarding claims 1 and 2, Nishida et al, with the invention for *reading out textual information with synthesized speech*, reads on every feature of claim 1 for a *method of synthesizing voice* as follows:

Nishida et al reads on the feature of a *voice synthesization method for producing a synthesized sound that corresponds to character information included in transmitted information* (claim 1 lines 46-47), *the transmitted information including the character information and tags* (the keyword read-out region of claim 1 lines 52-53) *adapted to reserve the character information* (column 17 lines 1-4 meeting the specification for reserved in lines 5 & 9 of page 3 in the instant specification), *the method comprising the steps of:*

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- *A) recognizing a tag in the character information (i.e., exists in claim 1 line 60);*
- *B) comparing the tag recognized in step A with a predetermined tag (i.e. specified in claim 1 line 65); and*
- *C) producing synthesized sound from character information (column 17 lines 5-8)*

Where Nishida et al is silent as to the features being *written in a programming language* the instructions, the examples provided in the VoiceXML Programming Tutorial provide sufficient instruction and example to make obvious every feature of the claims for a *voice synthesization method for producing a synthesized sound that corresponds to character information included in transmitted information written in a programming language* (section 2.3, lines 1-4 page 8), *the transmitted information including the character information and tags adapted to reserve the character information* (section 13.4 pages 46-47) as follows:

- The VoiceXML Programming Tutorial reads on the feature of *A) recognizing a tag in the character information* (with the *audio tag* of 13.3 page 46);
- The VoiceXML Programming Tutorial teaches the feature of *B) comparing the tag recognized in step A with a predetermined tag* (by setting the *form item variable* lines 14-16 page 21 – the predetermined tag being either the *instruction* set by the compiler/interpreter or a *key variable* set by the programmer); *and*
- Regarding the final features in the claims, the VoiceXML Programming Tutorial teaches the step *C)* of claims 1 and 2 (with *sub-dialogs* section 3.1 page 10 to provide distinct *vocalization* and *non-vocalization/display*), reading on the features of both claims, as follows:

With respect to the final feature of claim 1, the VoiceXML Programming Tutorial teaches the feature of *producing a synthesized sound from the character information except for character information reserved by the recognized tag only when the two tags match each other* (with the instructions for setting to *not be selected*, lines 27-28 page 25), and

With respect to the final feature of claim 2, the VoiceXML Programming Tutorial teaches the feature for *producing a synthesized sound from character information reserved by the recognized tag only when the two tags match each other* (by forced to *revisit/select*, lines 28-29 page 25), respectively.

It would have been obvious to a person of ordinary skill in the art of speech signal processing at the time of the invention to apply the method/teachings of the VoiceXML Programming Tutorial as taught by the programming instructions and examples to the device/method of Nishida et al so as to construct a series of operations that will accompany the automated exchange of information with speech when required.

9. Regarding claims 3 and 6, the claims are set forth with the same limits as claims 1 and 2, respectively. Nishida et al (claim 6 lines 31-37) reads on the feature that *at least one of the steps of starting and ending production of the synthesized sound corresponds to the character information only when the two tags match each other in step B* (column 19 lines 39-41), where the steps of *starting and ending production* are intrinsic features of speech (as distinguished from noise or music).

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10. Regarding claims 4 and 7, the claims are set forth with the same limits as claims 1 and 2, respectively.

- Nishida et al reads on *the step of D) recognizing a content of the character information reserved by the tag recognized in step A (i.e., the keyword is determined to exist in column 20 line 3) and the step of E) comparing the content of the reserved character information recognized in step D with a content of predetermined character information (i.e., checks whether specified in lines 7-8 column 20); and*
- Nishida et al reads on *the step of F) at least starting or ending production of the synthesized sound that corresponds to the reserved character information when the two contents of the character information match each other in step E (column 20 lines 13-23).*

11. Regarding claims 5 and 8, the claims are set forth with the same limits as claims 4 and 7, respectively.

Nishida et al reads on *the step of G) comparing the reserved character information recognized in step D with a plurality of predetermined character information on the basis of predetermined logic condition (shown with the "keyword" and read-out region of column 3 – see column 5 line 1); and the step of H) at least starting or ending production of the synthesized sound when the predetermined logic condition is met as a result of comparison in step G (column 20 line 36).*

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Guerra (U.S. Patent Publication 2002/0173961 A1) dynamic, robust fault tolerant audio output in a speech recognition framework addresses the application features.
- Albayrak et al (U.S. Patent 6,662,163 B1) for programming portable devices from a remote computer system teaches installation and operation of logic modules.
- Jost et al (U.S. Patent Publication 2004/0021899 A1) dialog manager for speech.
- Abe (U.S. Patent 5,940,797 A) speech synthesis utilizing auxiliary information.
- Witteman (U.S. Patent 6,243,676 B1) searching & retrieving multimedia information.
- Hughes et al (U.S. Patent 6,282,268 B1) voice system imbeds start/stop controls.

13. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Daniel A. Nolan at telephone (703) 305-1368 whose normal business hours are Mon, Tue, Thu & Fri, from 7 AM to 5 PM.

If attempts to contact the examiner by telephone are unsuccessful, supervisor Richemond Dorvil can be reached at (703)305-9645.

The fax phone number for Technology Center 2600 is (703)872-9314. Label informal and draft communications as "DRAFT" or "PROPOSED", & designate formal communications as "EXPEDITED PROCEDURE". Formal response to this action may be faxed according to the above instructions,

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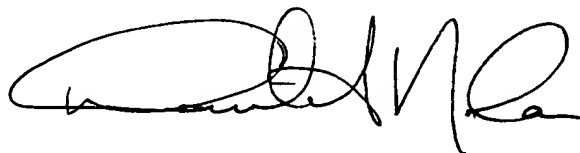
P.O. Box 1450
Alexandria, VA 22313-1450

or hand-deliver to: Crystal Park 2,
2121 Crystal Drive, Arlington, VA,
Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to Technology Center 2600 Customer Service Office at telephone number (703) 306-0377.

Daniel A. Nolan
Examiner
Art Unit 2654

DAN/d
April 10, 2004

A handwritten signature in black ink, appearing to read 'Daniel A. Nolan', with a stylized flourish at the end.

**DANIEL NOLAN
PATENT EXAMINER**